From:

ROY SMITH

To:

R5WST.R5WASTE(VANLEEUWEN-PATRICIA)
Tuesday, March 19, 1996 12:38 pm

Date:
Subject:

sandy justification -Forwarded -Forwarded -Reply

Hi Pat,

Let me get this straight. Changing the bioavaibility factor from 30% to 25% resulted in the cleanup trigger going from 800 to 4000 ppm. Say WHAT?

My problems:

- 1. EPA's goal is that no individual child should have more than a \ 5% chance of equaling or exceeding 10 ug/dL. The stated goal that only 5% of all children exceed this level is less restrictive. The most exposed individuals should still only have that 5% risk.
- 2. Our view here is that cleanup levels should be expressed as post-remedial averages, to be confirmed by sampling after cleanup operations have finished. For residential exposure, averages are applied to each individual yard. The cleanup trigger (i.e., the concentration that triggers removal so that the average can be met) should be considered an engineering estimate rather than a decision to be placed in the ROD. The PRP is responsible for meeting the average, and the choice of the trigger to do this is their problem. If their chosen trigger is too high to meet the goal, they must go back and remove more soil.
- 3. The depth for removal should be site-specific and based on appropriate core data. I have no problem with 6" per se, provided the data support it.
- 4. I have the distinct impression that Region 8 diddled the ingestion rate without independent verification, as they did with Leadville. Did they?
- 5. I don't expect this to create problems with Palmerton (note: I've been wrong before) because:
- (a) we're doing a site-specific swine feeding study (which includes geochemistry),
- (b) we intend to adjust ingestion rate based on site-specific dust loading,
- (c) we may apply some ex post facto adjustments to the modeled predictions based on factors evaluated in our validation work (e.g., age of house, time spent playing outdoors, and education of parents) that significantly biased results at other sites,
- (d) we have data from various depths, and



(e) we'll stick with 5% risk per individual rather than for the whole population.

Also, we've had meeting ad nauseum with the PRPs, who are beginning to appear resigned to these things. I may be wrong here, too.

Thanks for the heads-up.

CC:

MacMillan-Fred

From: MARK MADDALONI

To: R10SEA1.ESD.LORENZANA-ROSEANNE, R1CANAL.R1WMD.MCDO...

Date: Tuesday, March 19, 1996 1:22 pm

Subject: sandy justification -Forwarded -Forwarded -Reply

Interesting rationale. Did I miss something? The text identified the potential hazard (i.e., 73% of the population distribution exceeding 20 ug/dl) associated with a soil lead level of 4,000 ppm and then proceeded to recommend it.
>>> PATRICIA VANLEEUWEN 3/19/96, 12:43pm >>> Forwarded Mail received from: PATRICIA VANLEEUWEN

Mark, Roy, Kevin, Margaret, Roseanne

FYI. Have you seen this? Will it impact your ability to negotiate a protective soil lead cleanup at any of your sites? Region 5 is presently dealing with ASARCO at a site in IL, and they refer to Sandy, UT constantly!!

If you are concerned about a 4000 ppm/6 inch soil lead cleanup level for residential areas, please contact Region 8 and also forward your comments to Larry Z and Larry Reed.

Pat

CC: RTPMAINHUB.WPXGATE.REED-LARRY, RTPMAINHUB.WPXGATE....

From: ROSEANNE LORENZANA

To: R5WST.R5WASTE (VANLEEUWEN-PATRICIA)
Date: Tuesday, March 19, 1996 3:45 pm

Subject: sandy justif -Reply

YES... it has an effect. In particular, our Mine Site Coordinator (Nic Ceto) is VERY concerned about many of R8's managment decisions, and, specifically, how it affects R10's work in the Coeur d'Lene basin (in which Bunker Hill and other mines are sited). Every region can derive site-specific cleanups, but it helpful to other regions when it's known what was the basis and how it is health protective.

What I'd like to know about this cleanup level is detailed technical (or risk assessment) information about how the value was derived, and, separate from the technical derivation, what is the management component of the cleanup level. I don't want to read the entire risk assessment for the site! Maybe a table or list of the exposure assumptions and explanation of the use of the IEUBK would suffice ... hard to say.

This is not the only site in which R8 has developed a BIG number for lead, and R10 (as well as other regions) have previously asked for DETAILS. I'm assuming that Chris and Susan would be willing to guide other risk assessors through their analytical process, but that they are LIMITED by workload and time.

Do you think contacting Larry Z, Larry Reid and/or David Bennett would result in R8's management giving Chris and Susan time for explanations?

What do you think?

>>> PATRICIA VANLEEUWEN 03/19/96 09:43am >>> Forwarded Mail received from: PATRICIA VANLEEUWEN

Mark, Roy, Kevin, Margaret, Roseanne

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Pat

From:

PAUL STEADMAN

To:

VANLEEUWEN-PATRICIA

Date:

Wednesday, March 20, 1996 8:31 am

Subject:

4000 PPM RESIDENTIAL LEAD CLEAN-UP LEVEL IN UTAH

PAT, TIM, SHAMID, BRAD!

THIS DECISION IN UTAH FOR THE RESIDENTIAL LEAD ABATEMENT TO A 4000 ppm LEVEL IS SO POORLY CONCEIVED AS TO BE ALMOST CRIMINAL. I'VE READ THE JUSTIFICATION DISCUSSION FROM BRIAN P'S OFFICE IN REGION VIII AND LESS IS UNDERSTOOD THAN BEFORE I READ IT! MORESO, THE LOCATION OF THAT SITE IS WITHIN A HIGHLY CONCENTRATED PRIMARY RECEPTOR (children <7 yrs., gravid females) POPULATION AND THE AREA IS SUBJECT TO FURTHER DEVELOPMENT IN THE SHORT-TERM FUTURE WITH ADDITIONAL RESIDENTIAL DEVELOPMENT. TOO, A NATIONAL POLICY EXISTS OR CERTAINLY MUST BE ESTABLISHED TO PREVENT SUCH ILL-CONCEIVED DECISIONS IMPACTING SERIOUS TO GRAVE PUBLIC HEALTH ISSUES OF THIS MAGNITUDE NOW. THIS DECISION MUST BE OVERTURNED AND SUBSTANTIALLY ADJUSTED DOWNWARD FOR ALL THOSE EFFECTED OR POTENTIALLY EFFECTED CURRENTLY AND

PLEASE ALLOW ME TO PARTICIPATE IN THE TELECONFERENCE.

-prs

CC:

ROLLINS-FRANK, PRENDIVILLE-TIMOTHY, BRADLEY-BRAD

Potential Problems/Inconsistencies With Sandy Remedy

More information is needed to pin down specific inconsistencies between the Sandy residential cleanup level and that for the NL Industries in Granite City, Illinois; however, here is a list of potential problems/inconsistencies:

- 1. Relying heavily on a blood study to select a residential soil lead cleanup level directly contradicts assertions made in the NL Industries litigation (i.e. the blood study is a useful tool but not a basis for selection of a cleanup level- use of the IEUBK model is stressed). Region 5 would like a copy of the blood study at Sandy; experts were used by Region 5 in the interpretation of results from the Granite City blood study.
- 2. The methodology used to select the Sandy cleanup level appears to be inconsistent with the July 1994 guidance. The goal of 95% below 10 ug/dl is a goal, not a performance standard.
- 3. The Sandy cleanup level does not appear to follow a logical sequence and may be arbitrary. For example, changing the bioavailability from 30% to 25% will not change the cleanup level from 800 ppm to 4000 ppm. Also, the bioavailability value of 25% does not appear to be site-specific; the value came from studies done at the Leadville, CO site. If this is the case, it is totally inappropriate to apply this value at the Sandy site.
- 4. The remedial approach seems blind to the fact that new owners will move into the area, bringing changes to the level of education and number of children and pregnant women residing at given residences.

Region 5 clearly needs more information to evaluate the impacts of the Sandy cleanup level and methodologies used to select it. This is an extremely sensitive issue that could jeopardize the entire NL Industries litigation (at two Region 5 sites, both of which involve slag, remedies were selected and susequently reaffirmed by experts regarding residential soil lead cleanup levels). Given this fact, Region 5 is requesting that discussions occur before anything is finalized for the residential soil lead cleanup level at the Sandy site. Region 5 would like Headquarters to be involved in any such discussions to help ensure national consistency. Region 5 is also interested in the State of Utah's opinion on the Sandy cleanup level. stated at the last Large Area Lead Sites meeting in April 1995, Region 5 would like Region 8 to document any risk management decisions used at their sites. It is hard to understand how Region 8 could arrive at 4000 ppm as a protective cleanup level based soley on the same science that is generating much lower (an order of magnitude) cleanup levels at other, similar sites throughout the country. It is also difficult to understand why cost is a major driving factor at a site that is estimated to cost \$2.5 million to remediate to 4000 ppm.

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